

Case 3201

***Scarabaeus punctatus* Villers, 1789 (currently *Pentodon bidens punctatus*; Insecta, Coleoptera): proposed conservation of the specific name**

Frank-Thorsten Krell

Department of Entomology, The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: F.Krell@nhm.ac.uk)

Abstract. The purpose of this application is to conserve the specific name of *Scarabaeus punctatus* Villers, 1789 (SCARABAEIDAE, DYNASTINAE), which is a junior primary homonym of *S. punctatus* Linnaeus, 1758 (SCARABAEIDAE, RUTELINAE). Despite the homonymy both specific names have been used since publication and are currently in use; they have never been treated as congeneric and neither has been included in the original genus since 1798. The name *Pentodon bidens punctatus* (Villers) refers to the west and central Mediterranean subspecies of a common Palaearctic rhinoceros beetle; *Pelidnota punctata* (Linnaeus) refers to a common chafer occurring in the eastern part of the U.S.A. and southern Ontario.

Keywords. Nomenclature; taxonomy; Coleoptera; SCARABAEIDAE; DYNASTINAE; RUTELINAE; *Pentodon bidens punctatus*; *Pelidnota punctata*; rhinoceros beetles; chafers; Mediterranean; eastern North America.

1. Linnaeus (1758, p. 350) described *Scarabaeus punctatus* from 'India'. In 1775 Fabricius (p. 33) transferred the species ('from America') to his new genus *Melolontha*. Later Latreille (1802, p. 152) placed it in his new genus *Rutela*, and finally MacLeay (1819, p. 158) established the genus *Pelidnota* for the species and this classification has been maintained. The specific name has been continuously treated as valid since its first publication. The identity of the species is unequivocal because Linnaeus (1764, p. 23) subsequently described it in detail and there is a specimen in the collection of the Zoological Museum, Uppsala which has been considered to be an original specimen (see Landin, 1956, p. 11); Wallin (1994, p. 43) incorrectly recorded that Landin (1956) had designated this specimen as the lectotype. The type locality ('India'), given as a locality for the species by Linnaeus in all his publications, was that indicated for other American species (see Landin, 1956). The name *Pelidnota punctata* refers to a well known chafer, called the spotted grape beetle, from the eastern U.S.A. and southern Ontario, Canada, included in the subfamily RUTELINAE (see Hardy, 1975 and Arnett, 2000). It has occasionally been reported to be a pest (Hayes, 1925, p. 90)

2. Villers (1789, p. 40, pl. 1, fig. 3) described *Scarabaeus punctatus* from 'Occitania circa Nemausum' (Nîmes in southern France). In 1798 Fabricius (p. 21) transferred the species to *Geotrupes* Latreille, 1796. Hope (1837, p. 92) designated *S. punctatus* Villers as the type species of his new genus *Pentodon* (SCARABAEIDAE, DYNASTINAE), where it has remained. No type specimens are known. Endrődi (1969, p. 166)

supposed them to be in the Muséum d'Histoire Naturelle in Lyon but there are no *Pentodon* specimens amongst the old collections in this museum; Villers' collection is most probably destroyed (J. Clary and H. Labrique, in litt., 2000). The specific name *punctatus* Villers has been treated as valid since its publication (see the recent works of El-Hariri, 1968; Georghiou, 1977; and Peez & Kahlen, 1977; a list of 12 earlier publications is held by the Commission Secretariat). Since Endrödi's (1967) revision of *Pentodon*, *P. punctatus* has generally been treated as a geographic subspecies of *Pentodon bidens* (Pallas, 1771) (see, for example, Endrödi, 1985; Baraud, 1992; and Carpaneto & Piattella, 1995).

3. The name *Scarabaeus punctatus* Villers, 1789 has unused junior synonyms. *S. punctulatus* Rossius, 1790 (p. 9) has not been used as valid since the early 19th century and is a junior homonym of *S. punctulatus* Gmelin, 1788. The synonym *Pentodon castaneus* Mulsant, 1842 (p. 384), described as a variety of *P. punctatus* Villers, has never been treated as a valid name; the original author himself neglected it in the second edition of his monograph of French scarab beetles (Mulsant & Rey, 1871, p. 242).

4. As noted in paras. 1 and 2 above, the names *Pelidnota punctata* (Linnaeus, 1758) and *Pentodon bidens punctatus* (Villers, 1789) are both currently in use for well-known and common taxa. *Pelidnota punctata* had already been removed (in 1775) from *Scarabaeus* before *S. punctatus* Villers was described. The latter species was removed from *Scarabaeus* in 1798. Thus, the species have never been treated as congeneric and neither has been included in the original genus since 1798. The two species are currently placed in different subfamilies, which are sometimes treated as families. Replacement of the well known name *Pentodon punctatus* (Villers) by the unused junior synonym *Pentodon castaneus* Mulsant, 1842 (see para. 3 above) would cause considerable and unnecessary confusion and the case is referred to the Commission under Article 23.9.5 of the Code.

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to rule that the specific name *punctatus* Villers, 1789, as published in the binomen *Scarabaeus punctatus*, is not invalid by reason of being a junior primary homonym of *Scarabaeus punctatus* Linnaeus, 1758;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Pelidnota* MacLeay, 1819 (type species by monotypy *Scarabaeus punctatus* Linnaeus, 1758);
 - (b) *Pentodon* Hope, 1837 (type species by original designation by Hope (1837) *Scarabaeus punctatus* Villers, 1789);
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *punctatus* Linnaeus, 1758, as published in the binomen *Scarabaeus punctatus* (specific name of the type species of *Pelidnota* MacLeay, 1819);
 - (b) *punctatus* Villers, 1789, as published in the binomen *Scarabaeus punctatus* (specific name of the type species of *Pentodon* Hope, 1837) (not invalid by the ruling in (1) above).

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).